

What are the determinants of underpricing in Initial Public Offerings? Evidence from Indonesia

Heriyanto Heriyanto^{1,*}, Ming Chen², Erni Lyani³

Universitas Katolik Misi Charitas, Indonesia^{1,2,3}

Corresponding e-mail: heriyanto@ukmc.ac.id*

ABSTRACT

Purpose — *This study aims to investigate the impact of different variables, including firm size, underwriter reputation, firm age (representing asymmetric information), board ownership, institutional ownership (representing ownership structure), industry sector (financial or non-financial), and ownership status (state-owned or non-state-owned enterprises) on the initial return, which serves as a measure of underpricing level.*

Method — *We focus on companies that underwent initial public offerings (IPOs) between 2010 and 2019. For our study, we selected a sample of 261 firms using the purposive sampling technique. To analyze the data, we employed a multiple linear regression model and utilized SPSS as a testing tool.*

Result — *Based on our research findings, we have identified that firm size, underwriter reputation, and institutional ownership significantly affect the level of underpricing. However, we found no evidence to suggest that factors such as company age, board ownership, industry sector, or ownership status have any impact on the underpricing level. Our results support the notion that asymmetric information plays a crucial role in explaining the observed underpricing phenomenon in IPOs, while industry type and ownership structure do not contribute to its explanation.*

Contribution — *This study makes a valuable contribution to the existing research on IPO underpricing in Indonesia. It stands out by employing a comparatively long research period and incorporating not only variables that address asymmetric information but also variables pertaining to governance mechanisms, specifically board ownership and institutional ownership.*

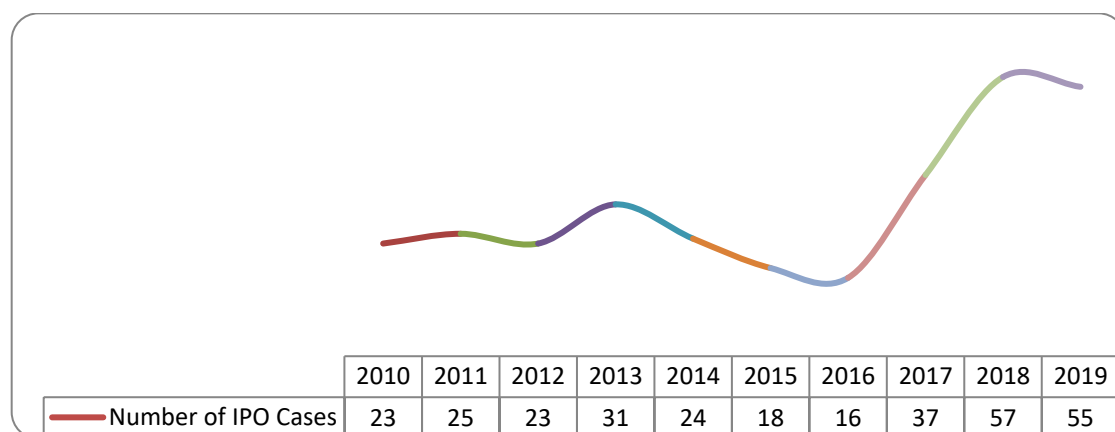
Keywords: *underpricing, asymmetric information, ownership structure*



INTRODUCTION

The capital market plays a vital role in fostering economic growth within a country, offering a platform for those seeking capital to connect with those who possess it. Issuers utilize the capital market as a means to raise funds from the public through the issuance of securities such as bonds, stocks, and derivative instruments. Investors, on the other hand, utilize the capital market to engage in various investment opportunities with a range of securities that align with their risk preferences and desired profit levels. The development of Indonesia's capital market has been notably rapid, exemplified by the increased number of listed companies on the Indonesia Stock Exchange (IDX). In 1990, the Jakarta Stock Exchange (JSE) had only 60 listed companies (Hanafi, 2016). By 2020, the number of listed companies on the IDX had risen to 691. Figure 1 presents the data showcasing the growth in the number of IPO cases on the IDX from 2010 to 2019.

Figure 1. The development of the number of IPO cases on the IDX during 2010-2019



Source: Data processed from Annual Factbook

Based on the data depicted in Figure 1, it is evident that throughout the 2010-2019 period, companies consistently pursued the IPO route, aiming to become listed on the IDX. A total of 309 IPO cases were recorded during this timeframe, with a notable surge observed in the last three years (2017-2019). Despite the progress made in the Indonesian capital market over the past decade (2010-2019), the underpricing phenomenon, which is a prevalent occurrence in IPOs worldwide, persists in a majority of IPO cases on the IDX. As explained by Hanafi (2016), the underpricing phenomenon during IPOs is regarded as a "loss" for issuing companies since it results in missed opportunities to secure higher amounts of funds.

Researchers around the globe have conducted numerous studies aiming to elucidate the underpricing phenomenon. Similarly, in Indonesia, several researchers have examined the factors influencing the level of underpricing during IPOs. These studies include the works of [Permanisuci \(2015\)](#), [Rosyidah \(2014\)](#), [Wahyusari \(2013\)](#), [Wiguna and Yadnyana \(2015\)](#), [Marlina et al. \(2017\)](#), and [Saifudin and Meriani \(2017\)](#).

According to [Walker \(2008\)](#), previous studies have put forth several theories to explain the underpricing phenomenon during IPOs, including information asymmetry, winners curve theory, and signaling theory. [Ljungqvist \(2007\)](#) mentioned in [Hanafi's \(2016\)](#) work that underpricing can be explained by three main theories or conceptual frameworks: the asymmetric information model, institutional theory and ownership control, and behavioral finance.

The underpricing phenomenon in IPOs has been examined from various perspectives, leading to a wide array of theories and concepts put forth by researchers. Consequently, the factors and variables used to explain underpricing encompass a diverse range of considerations. These factors include company size and auditor quality ([Adjasi et al., 2011](#)), underwriter qualities ([Boulton et al., 2011](#)), company reputation ([Kaur & Singh, 2019](#)), country-specific characteristics ([Engelen & van Essen, 2010](#)), board of directors structure ([Darmadi & Gunawan, 2013](#); [Deb, 2014](#); [Dolvin & Kirby, 2016](#)), corporate governance practices ([Arora & Singh, 2020](#)), earnings management ([Boulton et al., 2011](#); [Ammer & Ahmad-Zaluki, 2016](#)), stock liquidity ([Bouzouita et al., 2015](#)), institutional ownership ([Darmadi & Gunawan, 2013](#)), company quality and analyst predictions ([Zheng & Stangeland, 2007](#)), director characteristics ([Xu et al., 2017](#)), socioemotional wealth ([Leitterstorf & Rau, 2014](#)), information availability ([Chhabra et al., 2017](#)), research specific to family firms ([Leitterstorf & Rau, 2014](#); [Huang et al., 2019](#)), and research focusing on Sharia-compliant shares ([Mayes & Alqahtani, 2015](#)).

Several previous studies, including [Saifudin and Meriani \(2017\)](#), [Pahlevi \(2014\)](#), [Hoque \(2014\)](#), and [Mayes and Alqahtani \(2015\)](#), have demonstrated that company size serves as a proxy for asymmetric information and influences the level of underpricing experienced by companies during IPOs. Similarly, the age of a company, as a proxy for asymmetric information, has been shown to affect the underpricing level in IPOs, as indicated by studies conducted by [Pahlevi \(2014\)](#) and [Mayes and Alqahtani \(2015\)](#).

The reputation of underwriters has also been identified as a factor impacting the level of underpricing, as supported by research conducted by [Rexy et al. \(2017\)](#) and [Hanafi \(2016\)](#). [Hanafi \(2016\)](#) suggests that underwriters with a good

reputation have access to a broader range of analysts who can disseminate relevant information about the company, thereby encouraging investor participation in the IPO process.

Furthermore, the underpricing phenomenon is explained by signaling theory, as developed by [Grinblatt and Hwang \(1989\)](#), [Allen and Faulhaber \(1989\)](#), and [Welch \(1989\)](#). This theory provides insights into the underpricing mechanism during IPOs.

According to [Kurniasih and Santoso \(2008\)](#), both managerial ownership and institutional ownership have a positive impact on market valuation. In contrast, [Rustami et al. \(2017\)](#) suggest that higher institutional ownership enables more efficient resource utilization and better waste prevention by management. Regarding managerial ownership, [Rustami et al. \(2017\)](#) state that an increase in managerial ownership can enhance firm value and elicit a positive stock price reaction.

To maximize the success of an IPO, it is not necessary for the company to establish the initial share price with an underpricing strategy because the quality and value of the company will improve. [Hanafi \(2016\)](#) proposes that, based on the incentive presentation hypothesis, if decision-makers (directors) within the company lack an interest in raising the share offering price, the level of underpricing will be higher.

In [Hanafi's \(2016\)](#) research, the type of industry is also utilized to explain the level of underpricing. Companies are categorized as either financial or non-financial. [Sartono \(2012\)](#) mentioned in [Marlina et al. \(2017\)](#) argues that companies with higher debt levels carry financial risk, leading to potential stock price suppression during IPO offerings and resulting in relatively higher levels of underpricing.

This research makes multiple contributions to the field. Firstly, it employs a comparatively lengthy testing period and a sizable sample size, enhancing the robustness of the findings. Secondly, the study extends beyond variables related to company characteristics and incorporates governance mechanisms such as board ownership and institutional ownership. Additionally, several control variables are included to strengthen the research results, including the type of industry (financial and non-financial sectors) and the ownership status of companies (state-owned enterprises and non-state-owned enterprises). The inclusion of these variables provides context and considers other factors that can explain underpricing during a company's IPO, as suggested by [Butler et al. \(2014\)](#).

The objective of this study is to examine the impact of various factors on the underpricing level. Specifically, the study aims to investigate how firm size, underwriter reputation, firm age, board ownership, institutional ownership, type of industry sector (financial or non-financial), and ownership status (state-owned enterprises or non-state-owned enterprises) influence the level of underpricing observed during the IPO process.

METHOD

Research design

This quantitative research focuses on companies that undergo IPOs on the Indonesian Stock Exchange and experience underpricing. The study utilizes multiple linear regression analysis to examine the causal relationships among the variables. Descriptive analysis is also employed to enhance the findings of the quantitative analysis. The data utilized in this study are sourced from the Indonesian Stock Exchange.

Population and sampling techniques

The population for this study consists of all companies that were listed on the Indonesia Stock Exchange and conducted an IPO during the 2010-2019 period. The sample selection was conducted using a purposive sampling method, with specific criteria in place. The criteria included companies that had data on the share offering price and closing price one day after the IPO on the secondary market, companies that experienced underpricing, companies with complete data on financial statements, annual reports, and prospectus, companies with financial statements in Indonesian rupiah, companies that had not been delisted previously, and companies that had not undergone any mergers or acquisitions during the year of the IPO's financial statements.

A total of six companies were excluded from the sample due to delisting or relisting, while eight companies lacked complete ownership data (board of directors and institutional ownership). Additionally, one company did not have complete share price data (closing price). Furthermore, 28 companies were identified as experiencing overpricing based on their negative initial return. The final sample for this research comprised 261 companies that met all the specified criteria.

Variable definition and measurement

In this study, the company size is measured using the natural logarithm (Ln) of the total book value of the company's assets as stated in the financial statements. This measurement approach is consistent with the methodology used in the research conducted by [Hanafi \(2016\)](#).

The initial return is calculated based on daily returns, which is determined as the difference between the stock price on the first day of closing in the secondary market and the stock price at the time of the IPO. This difference is then divided by the stock price at the time of the IPO, following the methodology outlined by [Jogiyanto \(2000\)](#) as cited in [Wiguna and Yadnyana \(2015\)](#).

For the calculation of underpricing in this study, a similar approach was adopted as in the research conducted by [Permanisuci \(2015\)](#), [Tsang and Blevins \(2015\)](#), and [Hanafi \(2016\)](#).

The age of the company is measured as the time from the company's establishment according to the deed until the company conducted an IPO on an annual basis. This method of calculating company age aligns with the approaches utilized in the studies conducted by [Wiguna and Yadnyana \(2015\)](#) and [Hanafi \(2016\)](#).

In this study, the underwriter's reputation was assessed using two different approaches, both of which utilized a dummy variable. The distinction between the approaches lies in how the classification of the dummy variables is determined.

The first approach involves referring to a monthly list of the 20 most active brokerage houses based on total trading frequency. If the underwriter is among the top 10 in the list, it is assigned a value of 1; otherwise, it is assigned a value of 0. This proxy method has also been employed in the research conducted by [Wahyusari \(2013\)](#) and [Risqi and Harto \(2013\)](#).

The second approach is based on a cutoff value. The cutoff value is determined by calculating the mean value of the overall underwriter guarantee in a given year. If the guarantee value exceeds the cutoff value, it is assigned a value of 1; if it falls below the cutoff value, it is assigned a value of 0. This approach is utilized in the research conducted by [Hanafi \(2016\)](#).

The ownership of directors is measured by considering the proportion of common shares held by managerial shareholders out of the total outstanding shares. This measurement approach aligns with the method used by [Rustami et al. \(2017\)](#).

Similarly, institutional ownership is measured by considering the proportion of ordinary shares owned by institutional shareholders out of the total outstanding shares. This measurement approach is consistent with the method employed by [Rustami et al. \(2017\)](#).

In this study, the categorization of the industry type follows the classification utilized by [Hanafi \(2016\)](#) in his research. A dummy code is employed, assigning a code of 1 to companies in the financial sector (represented by code number 8 based on the JASICA classification, which includes banks, insurance companies, financial institutions, and other entities in the financial sector). Non-financial sector companies are assigned a code of 0.

Regarding privatization, a code of 1 is assigned if the IPO occurs in a state-owned enterprise, and a code of 0 is assigned if it occurs in a non-state-owned enterprise. This measurement approach aligns with the method employed by [Hanafi \(2016\)](#).

Table 1. Variable measurement

Variable Description	Variable	Measurement
Dependent	Underpricing (Initial Return)	(Closing Stock price on first day – Stock price on IPO) / Stock price on IPO
Independent	Company Age	Year of listing – Year Established
	Company Size	Ln Total Aset
	Underwriter Reputation	Using the cut off (mean value) of all company guarantee values for a certain period. Code 1 (>Mean) and Code 0 (< Mean)
	Ownership of Directors (Managerial)	proportion of common shares held by manager shareholders out of total outstanding shares
	Institutional Ownership	proportion of common shares held by institutional shareholders out of total outstanding shares
	Industry Type	Code 1 (Financial Sector) and Code 0 (Non-Financial Sector)
	Share Ownership Status (Privatization)	Code 1 (Owned by SOEs) and Code 0 (Owned by Non-SOEs)

Source: Processed by the authors (2023)

Hypotheses development

Firm size and underpricing level

According to the theory of asymmetric information, larger companies are believed to have lower levels of asymmetric information. Previous studies, such as those conducted by [Saifudin and Meriani \(2017\)](#), [Pahlevi \(2014\)](#), and [Mayes and Alqahtani \(2015\)](#), have provided evidence supporting the notion that company size, as a proxy for asymmetric information, can influence the extent of underpricing observed during IPOs. Consequently, it is expected that larger companies experience lower levels of underpricing because there is reduced uncertainty in price estimation. Building on this understanding, the following assumptions can be made:

H1: Firm size affects the level of underpricing

Firm age and underpricing level

According to the theory of asymmetric information, it is believed that as a company ages, the degree of information asymmetry decreases. Consequently, the level of underpricing is expected to be low due to reduced uncertainty in price estimation. The age of a company can serve as a proxy for explaining the presence of asymmetric information, as indicated by previous studies conducted by [Darmadi & Gunawan \(2013\)](#), [Pahlevi \(2014\)](#), and [Mayes & Alqahtani \(2015\)](#), which examined the impact of company age on the underpricing level during initial public offerings (IPOs). Therefore, the following assumptions can be made based on this information:

H2: Firm age affects the level of underpricing

Underwriters reputation and underpricing level

According to [Hanafi \(2016\)](#), it is suspected that underwriters with a strong reputation will attract a broader pool of analysts who can effectively disseminate information about a company, thereby enticing investors to participate in the initial public offering (IPO) process. In such cases, companies are willing to accept underpricing conditions as they are motivated by the desire to garner attention from both analysts and investors. Multiple studies, including [Rexy et al. \(2017\)](#), [Hanafi \(2016\)](#), [Safitri \(2013\)](#), and [Darmadi & Gunawan \(2013\)](#), have demonstrated that the reputation of underwriters impacts the extent of underpricing observed during IPOs. Based on this evidence, it can be assumed that:

H3: Underwriters reputation affect the level of underpricing

Ownership structure and underpricing level

The level of underpricing in a company's initial public offering (IPO) may also be influenced by the ownership of shares by the company's directors, who are considered insiders. The signaling theory, proposed by [Grinblatt & Hwang \(1989\)](#), [Allen & Faulhaber \(1989\)](#), and [Welch \(1989\)](#), is often used to explain the underpricing phenomenon. Additionally, [Kurniasih & Santoso \(2008\)](#) suggest that both managerial ownership and institutional ownership have a positive impact on market valuation. Conversely, [Faizal \(2004\)](#) in [Rustami et al. \(2017\)](#) argues that increased institutional ownership enhances asset utilization and reduces wastefulness. In the case of managerial ownership, [Rustami et al. \(2017\)](#) state that an increase in managerial ownership can raise firm value and lead to a positive stock price reaction.

Furthermore, [Ljungqvist and Wilhelm \(2003\)](#) in [Hanafi \(2016\)](#) propose the incentive presentation hypothesis, which suggests that if the decision makers (directors) within a company lack an interest in increasing the share offering price, the level of underpricing will be high. Taking these factors into account, it can be assumed that:

H4: Board ownership affects the level of underpricing

H5: Institutional ownership affects the level of underpricing

Type of industry and underpricing level

The potential impact of industry type on the extent of underpricing in companies is also believed to exist. In a study by [Hanafi \(2016\)](#), companies are classified into financial and non-financial categories, suggesting that this division may play a role in determining the level of underpricing. Another perspective shared by [Sartono \(2012\)](#) in [Marlina et al.'s \(2017\)](#) work suggests that companies with higher levels of debt face financial risk, which could lead to difficulties in meeting their obligations. Consequently, these companies may deliberately lower their stock prices during initial public offerings (IPOs), resulting in relatively higher levels of underpricing. Building upon these findings, we can assume the following:

H6: Type of industry affects the level of underpricing

Ownership structure and underpricing level

The ownership structure of a company is also believed to impact the degree of underpricing it experiences. Hanafi (2016) suggests that state-owned enterprises (SOEs) tend to have lower levels of asymmetric information compared to non-SOEs. Consequently, it is suspected that SOEs exhibit relatively lower levels of underpricing. Building upon this observation, we can make the following assumption:

H7: Ownership structure affects the level of underpricing

RESULT AND DISCUSSION

Descriptive statistics

This study employed descriptive analysis, multiple linear regression analysis, and hypothesis testing as its research methodologies. The initial dataset consisted of 304 companies that conducted initial public offerings (IPOs) between 2010 and 2019. However, after applying certain criteria, the final sample for analysis comprised 261 companies.

Table 2 presents several key findings. Firstly, the average initial return value for companies that experienced underpricing during their IPOs was 0.3831, equivalent to 38.31%. Secondly, the average natural logarithm (ln) of total assets for the sampled companies was 27.5083. Additionally, the average age of the companies included in the research sample was found to be 17.86 years.

Moreover, the average level of director ownership in the IPO-conducting companies was 0.0949 (equivalent to 9.49%), while the average institutional ownership level was 0.6330 (63.30%). These figures provide insights into the ownership structure of the companies examined in this study.

Table 2. Descriptive statistics of initial return, firm size, age, board of directors ownership, and institutional ownership

Variable	Mean	Std. Deviation	N
IR	0,3831	0,25940	261
LnTA	27,5083	1,54403	261
Age	17,8659	13,32382	261
DO	0,0949	0,19579	261
IO	0,6330	0,26664	261

Source: Processed by the authors (2023)

Table 3 displays the distribution of companies across various categories. It reveals that out of the total sample, 186 companies (71.3%) fall under the non-top underwriter category, indicating their IPO transaction values are below the average. On the other hand, 75 companies (28.7%) are classified as top underwriters, signifying their IPO transaction values exceed the average.

When considering the industry type, the majority of companies, specifically 234 (89.7%), belong to the non-financial sector, while a smaller proportion of 27 companies (10.3%) operate within the financial sector.

Examining the ownership structure, it can be observed that a large portion of the companies, amounting to 254 (97.3%), are categorized as Non State-Owned Enterprises, whereas only 7 companies (2.7%) are identified as State-Owned Enterprises.

Table 3. Descriptive statistics of underwriters reputation, industry type, and ownership structure

Variable	Category	Frequency	Percentage
Underwriter's Reputation	Non - Top	186	71,3
	Top	75	28,7
Industry Type	Non - Finance	234	89,7
	Finance	27	10,3
Ownership Structure	Non State-Owned Enterprise	254	97,3
	State-Owned Enterprise	7	2,7

Source: Processed by the authors (2023)

Normality test

According to the findings presented in Table 4, the K-S (Kolmogorov-Smirnov) significance value is reported as 0.168. This result suggests that the residuals obtained from the regression model used in this study exhibit a normal distribution.

Table 4. Normality test

Sig. K-S	N
0,168	261

Source: Processed by the authors (2023)

Multicollinearity test

The results presented in Table 5 indicate that all variables in the research model have a VIF (Variance Inflation Factor) value below 10 and a tolerance value

above 0.1. These findings suggest that there is no evidence of multicollinearity among the variables, indicating that they are not highly correlated with each other in the regression model used for this study.

Table 5. Multicollinearity test

Variable	Tolerance	VIF
Ln Size	0,752	1,330
Firm's Age	0,834	1,198
Underwriter's Reputation	0,774	1,292
Ownership of Directors	0,512	1,951
Institutional Ownership	0,528	1,894
Industry Type	0,832	1,202
Ownership Structure	0,897	1,115

Source: Processed by the authors (2023)

Hypotheses test

The results presented in Table 6 showcase the outcomes of hypothesis testing, revealing the significant variables (below 5%) that impact the level of underpricing (represented by the initial return variable). The regression model used for this study incorporated all independent variables.

Among the tested hypotheses, it was found that H1, which posits that company size (proxied by Ln Total Assets) affects the level of underpricing in companies conducting IPOs, was accepted. Similarly, H3, which suggests that underwriter reputation influences the level of underpricing in IPO companies, was also accepted.

On the other hand, the variables related to company size, board of directors ownership, industry type, and company ownership structure (whether state-owned or non-state-owned) were not found to have a statistically significant effect on the level of company underpricing. This indicates that H2, H4, H6, and H7 were rejected.

Additionally, although the initial multiple linear regression testing in Model 1 showed that variable H5 was rejected at a significance level of 5%, it was found to be significant at an error tolerance level of 10%. Furthermore, regression testing in Model 2 demonstrated that the variable "ownership of institutions" is significant at a 5% error tolerance level. Therefore, H5 is considered acceptable in this study.

Discussion

Firm size on the level of underpricing

The findings of the research indicate a negative relationship between the size of the company and the level of information asymmetry between the company and investors. This perspective suggests that larger companies are more widely recognized by the public, resulting in reduced information asymmetry. Consequently, these companies experience lower levels of underpricing during IPOs. These results align with previous studies conducted by [Pahlevi \(2014\)](#) and [Saifudin & Meriani \(2017\)](#), which also found that firm size negatively affects the level of firm underpricing.

Firm age on the level of underpricing

Contrary to the research findings of [Safitri \(2013\)](#), [Hanafi \(2016\)](#), and [Saifudin & Meriani \(2017\)](#), the results of this study indicate that the age of the company does not have a significant impact on the level of underpricing.

From an information asymmetry perspective, it is generally believed that companies with longer lifespans would have lower levels of information asymmetry due to their greater familiarity among the public. Thus, one would expect older companies to experience lower levels of underpricing during IPOs.

However, it is important to note that the lack of significance in the relationship between company age and underpricing in this study could be attributed to the uneven distribution of the sample based on company age. Specifically, around 87% of the companies in the sample fell into the category of up to 34 years, while only 13% were categorized as falling between 34 to 69 years. This disproportionate distribution may have influenced the effectiveness of company age on the level of underpricing observed in this study.

Underwriters reputation on the level of underpricing

The research findings indicate a negative relationship between the reputation of the underwriter and the level of underpricing. From the perspective of information asymmetry, a reputable underwriter is expected to possess better knowledge about the company, enabling them to price the company's stock more accurately. Consequently, companies with reputable underwriters experience lower levels of underpricing during IPOs.

These results align with previous studies conducted by [Safitri \(2013\)](#) and [Rexy et al. \(2017\)](#), which also found that underwriter reputation has a negative effect on the level of underpricing in companies.

Overall, the findings suggest that the reputation of the underwriter plays a crucial role in mitigating information asymmetry and reducing the extent of underpricing experienced by companies during IPOs.

Board ownership on the level of underpricing

The research findings indicate that the ownership of the board of directors does not have a significant impact on the level of underpricing. This finding contradicts the perspective of agency theory, which suggests that board ownership can help mitigate conflicts of interest between directors and investors, thereby reducing supervisory costs.

This result is inconsistent with the research findings of [Darmadi & Gunawan \(2013\)](#), which found a significant relationship between board ownership and the level of underpricing.

One possible explanation for the lack of influence of board ownership on underpricing in this study could be attributed to the relatively low average level of director ownership in the research sample. The average ownership of directors was reported as only 9.49%, with a small standard deviation of 19.58%. These figures suggest that the role of the board of directors in minimizing supervisory costs may be relatively insignificant due to the low level of ownership.

Overall, the findings imply that in the context of this study, the ownership of the board of directors does not significantly impact the level of underpricing, potentially due to the relatively low ownership levels observed in the research sample.

Institutional ownership on the level of underpricing

The research findings indicate that institutional ownership has a significant effect on the level of underpricing. From the perspective of agency theory, institutional ownership serves as a mechanism to enhance the quality of supervision within a company, reducing the likelihood of management decisions that could potentially harm the company. Institutional ownership also helps in reducing the cost of supervising company management.

These results are consistent with previous research conducted by [Faizal \(2004\)](#) as reported in [Rustami et al. \(2017\)](#), which found a similar relationship between institutional ownership and the level of underpricing.

Type of industry on the level of underpricing

The research findings indicate that the industry type does not have a significant impact on the level of underpricing. These results contradict the research conducted by [Sartono \(2012\)](#) as cited in [Marlina et al. \(2017\)](#), which suggests that companies with higher debt levels, indicating financial risk, may experience greater underpricing during IPOs. Additionally, these findings are inconsistent with the research conducted by [Pahlevi \(2014\)](#) and [Hanafi \(2016\)](#).

One possible explanation for this discrepancy is the uneven distribution of the research sample across different industrial sectors. Only 10.3% of the companies included in the study belong to the financial sector, while the remaining 89.7% are from the non-financial sector.

Company ownership on the level of underpricing

The ownership status of companies, whether state-owned enterprises (SOEs) or non-SOEs, does not significantly affect the level of underpricing. This finding contradicts the research results of [Darmadi & Gunawan \(2013\)](#) and [Hanafi \(2016\)](#), which suggest that SOEs have lower levels of asymmetric information compared to non-SOEs. Consequently, SOEs are expected to exhibit relatively lower levels of underpricing.

The lack of influence of ownership status on the level of underpricing may be attributed to the unequal distribution of companies categorized as SOEs and non-SOEs in the research sample. Specifically, SOEs accounted for only 2.7% of the included companies, while non-SOEs represented 97.3%.

CONCLUSION

This study aims to investigate the impact of variables related to information asymmetry and company ownership structure on the level of underpricing experienced by companies during their initial public offerings (IPOs) on the IDX. The findings of this research revealed that company size, underwriter reputation, and institutional ownership have a negative effect on the level of underpricing in IPO companies. On the other hand, the age of the company, board of directors' ownership, industry type, and ownership structure do not have a

significant impact on the level of underpricing in IPO companies. These results suggest that asymmetric information plays a crucial role in explaining the underpricing phenomenon observed during IPOs, while industry type and ownership structure are not effective in explaining this phenomenon.

The implications of this research for investors are to consider specific factors when making investment decisions during a company's IPO. Investors should take into account the company size, underwriter reputation, and institutional ownership, as these variables have been found to influence the level of underpricing. Companies with larger sizes, reputable underwriters, and higher institutional ownership tend to experience lower levels of underpricing. Investors seeking long-term profitability, given the presence of information asymmetry in relatively small companies, are advised to invest in IPO companies that exhibit characteristics such as large company sizes, good underwriter reputations, and substantial institutional ownership. For company management, it is important to consider factors such as underwriter reputation and the composition of institutional ownership when planning and executing the IPO process. These aspects can have an impact on the level of underpricing experienced by the company. Overall, understanding the influence of company size, underwriter reputation, and institutional ownership can assist both investors and company management in making informed decisions during the IPO process.

Further research can benefit from an improved distribution of samples across various categories of research variables. Ensuring a more balanced representation can provide a comprehensive understanding of the relationships studied. Additionally, future studies can incorporate other company characteristic variables that reflect financial management performance, such as profitability and leverage. These variables can offer insights into the company's financial condition and prospects for the future.

REFERENCES

1. Adjasi, C. K. D., Osei, K. A., & Fiawoyife, E. U. (2011). Explaining Underpricing of IPOs in Frontier Markets: Evidence From The Nigeria Stock Exchange. *Research in International Business and Finance*, 25(3), 255–265. <https://doi.org/10.1016/j.ribaf.2011.01.005>
2. Allen, F., & Faulhaber, G. R. (1989). Signalling by Underpricing in The IPO Market. *Journal of Financial Economics*, 23(2), 303–323.
3. Ammer, M. A., & Ahmad-Zaluki, N. A. (2016). The Effect of Underwriter's Market Share, Spread and Management Earnings Forecasts Bias and Accuracy on Underpricing of Malaysian IPOs. *International Journal of Managerial Finance*, 12(3), 351–371. <https://doi.org/10.1108/IJMF-12-2014-0187>
4. Arora, N., & Singh, B. (2020). Corporate Governance and Underpricing of Small and Medium Enterprises IPOs in India. *Corporate Governance*, 20(3), 503–525. <https://doi.org/10.1108/CG-08-2019-0259>
5. Boulton, T. J., Smart, S. B., & Zutter, C. J. (2011). Earnings Quality and International IPO Underpricing. *The Accounting Review*, 86(2), 483–505. <https://doi.org/10.2308/accr.00000018>
6. Bouzouita, N., Gajewski, J.-F., & Gresse, C. (2015). Liquidity Benefits From IPO Underpricing: Ownership Dispersion or Information Effect. *Financial Management*, 44(4), 785–810.
7. Butler, A. W., Keefe, M. O. C., & Kieschnick, R. (2014). Robust Determinants of IPO Underpricing and Their Implications for IPO Research. *Journal of Corporate Finance*, 27, 367–383. <https://doi.org/10.1016/j.jcorpfin.2014.06.002>
8. Chhabra, S., Kiran, R., & Sah, A. N. (2017). Information Asymmetry Leads to Underpricing: Validation Through SEM for Indian IPOs. *Program: Electronic Library and Information Systems*, 51(2), 116–131. <https://doi.org/10.1108/PROG-01-2016-0009>
9. Darmadi, S., & Gunawan, R. (2013). Underpricing, Board Structure, and Ownership: An Empirical Examination of Indonesian IPO Firms. *Managerial Finance*, 39(2), 181–200. <https://doi.org/10.1108/03074351311294016>
10. Deb, P. (2014). Cutting The “Gordian Knot” Director Ownership, Underpricing, And Stock Liquidity in IPO Firms. *Journal of Managerial Issues*, 26(2), 130–156.
11. Dolvin, S. D., & Kirby, J. E. (2016). Euromoney Institutional Investor PLC The Impact of Board Structure on IPO Underpricing. *The Journal of Private Equity*, 19(2), 15–21. https://www.jstor.org/stable/44396791?seq=1&cid=pdf-reference#references_tab_contents

12. Engelen, P. J., & van Essen, M. (2010). Underpricing of IPOs: Firm-, issue- and country-specific characteristics. *Journal of Banking and Finance*, 34(8), 1958–1969. <https://doi.org/10.1016/j.jbankfin.2010.01.002>
13. Grinblatt, M., & Hwang, C. Y. (1989). Signalling and The Pricing of New Issues. *The Journal of Finance*, 44(2), 393–429.
14. Hanafi, M. M. (2016). Analysis of IPO Underpricing Fluctuation: Empirical Study in Indonesia Stock Exchange. *Jurnal Dinamika Manajemen*, 7(2), 129–138. <http://jdm.unnes.ac.id>
15. Hoque, H. (2014). Role of Asymmetric Information and Moral Hazard on IPO Underpricing and Lockup. *Journal of International Financial Markets, Institutions and Money*, 30(1), 81–105. <https://doi.org/10.1016/j.intfin.2014.02.001>
16. Huang, W., Li, J., & Zhang, Q. (2019). Information Asymmetry, Legal Environment, and Family Firm Governance: Evidence From IPO Underpricing in China. *Pacific Basin Finance Journal*, 57, 101–109. <https://doi.org/10.1016/j.pacfin.2019.01.005>
17. Kaur, A., & Singh, B. (2019). Edifying Role of Corporate Reputation in New Issue Market: Indian Evidence. *Asia-Pacific Journal of Business Administration*, 11(2), 159–170. <https://doi.org/10.1108/APJBA-06-2018-0098>
18. Kurniasih, L., & Santoso, A. L. (2008). Bukti Empiris Fenomena Underpricing dan Pengaruh Mekanisme Corporate Governance. *Jurnal Ekonomi Dan Kewirausahaan*, 8(1), 1–15.
19. Leitterstorf, M. P., & Rau, S. B. (2014). Socioemotional Wealth and IPO Underpricing of Family firms. *Strategic Management Journal*, 35(5), 751–760. <https://doi.org/10.1002/smj.2236>
20. Marlina, M., Widhianningrum, P., & Astuti, E. (2017). Pengaruh Debt to Equity Ratio dan Return on Asset Terhadap Underpricing Saham Perdana pada Saham-Saham Perusahaan yang Terdaftar di BEI Periode 2011-2015. *Forum Ilmiah Pendidikan Akuntansi*, 5(1), 439–449.
21. Mayes, D., & Alqahtani, F. (2015). Underpricing of IPOs in Saudi Arabia and Sharia Compliance. *Journal of Islamic Accounting and Business Research*, 6(2), 189–207. <https://doi.org/10.1108/JIABR-12-2013-0042>
22. Pahlevi, R. W. (2014). Analisis Faktor-Faktor yang Mempengaruhi Underpricing Saham pada Penawaran Saham Perdana di Bursa Efek Indonesia. *Jurnal Siasat Bisnis*, 18(2), 219–232.
23. Permanisuci, D. D. (2015). Faktor – Faktor yang Mempengaruhi Underpricing IPO di Bursa Efek Indonesia Periode 2008 - 2013. *Jurnal Manajemen*, 5(1), 18–25.
24. Rexy, M., Mahatidana, A., & Yunita, I. (2017). An Examination Factors Influencing Underpricing of IPOs in Financial and Manufacturing

- Industries on The Indonesia Stock Exchange Over The Period of 2011-2016. *International Journal of Scientific and Research Publications*, 7(11), 457. www.ijsrp.org
25. Risqi, I. A., & Harto, P. (2013). Analisis Faktor-Faktor yang Mempengaruhi Underpricing Ketika Initial Public Offering (IPO) di Bursa Efek Indonesia. *Diponegoro Journal of Accounting*, 2(3), 1–7. <http://ejournal-s1.undip.ac.id/index.php/accounting>
 26. Rosyidah, L. (2014). Pengaruh Karakteristik Perusahaan, Reputasi Underwriter dan Reputasi Auditor Terhadap Tingkat Underpricing. *Jurnal Ilmu Manajemen* |, 2(3), 965–978. www.belajarinvestasi.net
 27. Rustami, O., Nur, E., & Yuyetta, A. (2017). Analisis Pengaruh Biaya Audit, Praktik Tata Kelola Perusahaan, dan Struktur Kepemilikan Terhadap IPO Underpricing. *Diponegoro Journal of Accounting*, 6(3), 1–14. <http://ejournal-s1.undip.ac.id/index.php/accounting>
 28. Safitri, T. A. (2013). Asimetri Informasi dan Underpricing. *Jurnal Dinamika Manajemen*, 4(1), 1–9. <http://journal.unnes.ac.id/nju/index.php/jdm>
 29. Saifudin, & Meriani, A. (2017). Dampak Informasi Akuntansi dan Non Akuntansi Terhadap Initial Return Saham pada Perusahaan yang Melakukan Initial Public Offering di Bursa Efek Indonesia. *Jurnal Akuntansi Indonesia*, 6(1), 79–98.
 30. Tsang, E. W. K., & Blevins, D. P. (2015). A Critique of The Information Asymmetry Argument in The Management and Entrepreneurship Underpricing Literature. *Strategic Organization*, 13(3), 247–258. <https://doi.org/10.2307/26369275>
 31. Wahyusari, A. (2013). Analisis Faktor-Faktor yang Mempengaruhi Underpricing Saham Saat IPO di BEI. *Accounting Analysis Journal*, 2(4), 386–394. <http://journal.unnes.ac.id/sju/index.php/aaj>
 32. Walker, T. (2008). Family Control, Underwriter Prestige, and IPO Underpricing: A Cross Country Analysis. *The Multinational Business Review*, 16(2), 1–42.
 33. Welch, I. (1989). Seasoned Offerings, Imitation Costs, and The Underpricing of Initial Public Offerings. *The Journal of Finance*, 44(2), 421–449.
 34. Wiguna, I. G. N. H., & Yadnyana, K. (2015). Analisis Faktor-Faktor yang Mempengaruhi Initial Return pada Penawaran Saham Perdana. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 4(12), 921–946.
 35. Xu, Z. J., Wang, L., & Long, J. (2017). The Impact of Director's Heterogeneity on IPO Underpricing. *Chinese Management Studies*, 11(2), 230–247. <https://doi.org/10.1108/CMS-05-2016-0095>
 36. Zheng, S. X., & Stangeland, D. A. (2007). IPO Underpricing, Firm Quality, and Analyst Forecasts. *Financial Management*, 36(2), 45–64.